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150 PAULARINO AVE., SUITE 192  
COSTA MESA, CALIFORNIA 92626  
714-545-6220  
714-545-3876 (FAX)

**PROPERTY CONDITION SURVEY REPORT**

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**THE PLAZA AT PUENTE HILLS**

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**Burnham Portfolio**

17525-18271 Gale Avenue  
Industry, California

Prepared for:

**PRUDENTIAL REAL ESTATE INVESTORS**

6701 Center Drive West, Suite 710  
Los Angeles, California 90045  
Attention: Mr. Michael Tyre

Prepared by:

**MARX/OKUBO ASSOCIATES, LTD.**

150 Paularino Avenue East, Suite 192  
Costa Mesa, California 92626

Marx/Okubo Job No. 6170

October 10, 2000

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**THE PLAZA AT PUENTE HILLS**  
**Industry, California**

**TABLE OF CONTENTS**

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**SECTION**

---

- COVER LETTER
- PROPERTY CONDITION SURVEY REPORT
- EXHIBITS
  1. PHOTOGRAPHS
  2. FEMA FLOOD PLAIN COMPLETED DETERMINATION REPORT
  3. SEISMIC CONSULTANT REPORT
  4. ROOFING CONSULTANT REPORT

**DISTRIBUTION**

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Mr. Michael Tyre, Prudential Real Estate Investors (One original copy)  
Mr. Richard Brown, Developers Diversified Realty Corp. (One original copy)  
Mr. Joshua Pristaw, Coventry Real Estate Partners, Ltd. (One original copy)

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Mr. Michael Tyre, Principal  
Prudential Real Estate Investors  
6701 Center Drive West, Suite 710  
Los Angeles, CA 90045

Dear Mr. Tyre:

**RE: BURNHAM PORTFOLIO  
THE PLAZA AT PUENTE HILLS  
Industry, California  
Marx/Okubo Job No. 6170**

Marx/Okubo Associates, Ltd. (Marx/Okubo) has completed a Property Condition Survey Report of the The Plaza at Puente Hills located in Industry, California for Prudential Real Estate Investors (Prudential). This assessment consisted of a review of the physical conditions, architectural, structural, mechanical, and electrical components accessible or visible during the site visit, and the quality of construction. The project observation was conducted on June 2, 2000, by Michael P. Arias, Associate, and Timothy Harder, Project Coordinator.

The purpose of this project review is for Marx/Okubo and its consultants to provide an overview for Prudential, and in no way infers that every aspect of the project has been reviewed. The sole purpose of this report is to observe the major aspects of the property and evaluate their condition. No field test results or inspection records from the construction were available for our review.

Cost estimates are based upon quantity take-offs and a unit pricing method to arrive at line item totals. Unit prices are based upon historical data compiled by this office, and in no way imply that bids were received from trade subcontractors. No bid documents or corrective drawings were produced. It is not the intent of this office to assume any part of the design responsibility, but rather to report our findings to the Client to whom this report is addressed.

The scope of this review is to provide a general overview of building components, as well as related ADA and code requirements. It should be noted that a detailed compliance survey related to ADA, building codes, and zoning issues was not performed.

Marx/Okubo Associates, Ltd. consists of a group of engineers, architects, and construction consultants providing construction-related consulting services to approximately 50 institutional clients, both nationally and internationally. The main office of Marx/Okubo Associates, Ltd. is located in Denver, Colorado, with branch offices in Seattle, Washington; Costa Mesa, California; San Francisco, California; and Houston, Texas.

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Mr. Michael Tyre  
Burnham Portfolio  
The Plaza at Puente Hills  
October 10, 2000  
Page 2 of 2

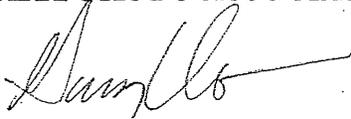
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The firm consists of approximately 30 professionals with various architectural and engineering backgrounds and extensive construction experience. Our firm is also involved in construction workout projects, owner representation in the development process, as well as in a wide variety of concerns having to do with the construction process.

Thank you for the opportunity to be of service to Prudential Real Estate Investors.

Sincerely,

**MARX/OKUBO ASSOCIATES, LTD.**



Gary C. Cohn, AIA  
Vice President

mrh

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By Federal Express

c: Mr. Richard Brown, Developers Diversified Realty Corp.  
Mr. Joshua Pristaw, Coventry Real Estate Partners, Ltd.

## PROPERTY CONDITION SURVEY REPORT

Portfolio Name:	Burnham Pacific Properties			
Field Observers:	Michael P. Arias; Timothy Harder	Office:	CM	Marx/Okubo Associates, Ltd.
Date Observed:	June 2, 2000	Phone/Fax:	714.545.6220 / 714.545.3876	

### A. GENERAL DESCRIPTION

Property Name:	Plaza at Puente Hills			
Street Address:	17525-18271 Gale Ave.	Access Provided: (Y/N)	Site: Y	Bldgs: Y   Roof: Y
City, State:	Industry, CA	Interviews Conducted: (Y/N)	N	
Asset Type (Power/Community Center):	Power Center	Age:	1987/1992	
SF (per mgmt):	518,938	# Buildings:	21	# Floors: 1 and 2
Parking spaces:	Total: 4,335	Ratio:	8.35/1,000 sf	Accessible: 68 + 9 van
FEMA 100 Year Flood Zone:	D	ALTA Survey Provided: (Y/N)	Y	
<b>Site Improvements</b>				
Paving:	Asphaltic concrete	Trash Enclosure:	Stucco over CMU with metal gates	
Walks:	Light broom finished concrete; exposed aggregate; some brick accents.	Fences:	Wrought iron	
Curbs:	Cast	Retaining Wall:	CMU, where applicable	
Loading area:	Concrete paving where applicable.	Landscaping:	Some shrubs, ground cover, lawns, medium trees.	
Utilities:	Water, gas, sewer, storm, telephone	Irrigation:	PVC piping, automatic control	
Storm Drainage:	Grate-type catch basin	Signage:	Monument, wall mounted, and raised, internal illumination	
<b>Structure</b>		Seismic Report (Y/N):	Y	UBC Seismic Zone: 4
Ftg/slab:	Continuous and pad concrete footings, slabs-on-grade	Floors:	Wood trusses, glu-lam beams/girders	
Frame:	CMU, wood frame, concrete tilt-up	Roof:	Wood truss, glu-lam, glu-lam beams/girders	
<b>Building Construction</b>				
Exterior Wall:	CMU/concrete/stucco over wood	Service Doors:	Hollow metal	
Fascia/Soffit:	Stucco	Dock Doors:	Roll-up overhead, where applicable	
Entries:	Aluminum storefront/wood frame	Roofing:	Multi-ply, built-up	
Windows:	Aluminum storefront/wood frame	Roof Drains:	Exterior metal, interior through curb	
<b>Systems</b>				
Cooling:	Electric package units – rooftop, some gas	Plumbing:	Copper	
Heating:	Electric package units – rooftop, some gas	Water heater:	Varies from none to 100-gallon gas	
Electrical:	Varies. From 400 to 2,500 amp, 208/120V and 277/480V services. All 3-phase, 4-wire.	Fire Sprinkler:	Automatic wet systems, most buildings	
Security:	Some cameras.	Fire Alarm:	Radionics, where observed.	
<b>Other Amenities</b>				
• None				

## PROPERTY CONDITION SURVEY REPORT

### B. GENERAL CONDITION OF PROJECT

In general, the site improvements and buildings are considered to be in good current condition. The asphaltic concrete paving is showing various signs of distress throughout. These signs include deteriorated and alligatored surfacing and faded striping. Reconstruction of paving areas will be necessary. Building exteriors are good, but painting can be anticipated within the next five years. Minor stucco repairs are necessary throughout, as well. Roofs are in fair to good condition with immediate maintenance repairs necessary, but primarily at Buildings S and Y. Overall, all roofs should have a life expectancy beyond five years, with routine maintenance. Structurally, the buildings have performed well, but a detailed structural analysis of the IKEA building should be considered to ensure that the wall tie anchors are comparable to those required by the current code. Mechanically, the project is in good condition, but repairs and replacement parts are necessary throughout the various buildings. Replacement of a large number of units can be anticipated over the next five years. No electrical or plumbing problems are apparent. Additional curb ramps and signage is necessary for disabled accessibility compliance.

It is our understanding that the theater building has been earmarked for demolition. However, our evaluation is based on renovation of the structure for potential retail use.

Description	Good	Fair	Poor	Other / Comments
Site Pavement, Walks, Curbs		X		Replace paving at rear
Landscaping and Irrigation	X			
Structural	X			See structural report. Additional study recommended.
Exterior Walls, Windows, Doors	X			Painting anticipated
Roofs, Rooftop Screens		X		See roofing report. Maintenance necessary.
Mechanical, Electrical, Fire Protection		X		Replace old HVAC units
Interior Common Areas				Not applicable.

### C. SEISMIC EVALUATION COMMENTS

No construction plans, engineering calculations or geotechnical report were provided for our review. The building structures appear to be in good current condition with no signs of significant settlement, distress, or overloading noted. Based on our observations of visible elements, the foundation and framing systems appear to carry existing loads with no significant problems. The buildings are not expected to sustain a probable maximum loss (PML) in excess of 15 percent for the strip buildings, 24 percent for IKEA, and 10 percent for the pad buildings, for a 15 percent average of present-day replacement value. The life safety risk of collapse is considered low. Refer to the attached report for a more detailed review.

The following seismic retrofit modifications are recommended at this time.

- Conduct a detailed study of the roof ties utilized at IKEA.

## PROPERTY CONDITION SURVEY REPORT

### D. ROOFING EVALUATION COMMENTS

No previous roofing reports or documentation regarding prior roofing maintenance or repairs were provided for review. The built-up roofs appear to be from the original construction and thus are approximately 8 to 13 years in age. Previous surface repairs of seams and selected wear were observed. No significant deficiencies were noted. Maintenance deficiencies noted include signs of pondings, debris and trash on the roofs, empty pitch pans, missing shingles at the parapets, and localized open joints in the base flashing. With increased levels of routine maintenance and annual inspections, these roofs should remain serviceable for at least 5 additional years. Refer to the attached report for a more detailed review.

The following roofing repairs are recommended at this time.

- Perform immediate maintenance and cleanup
- Seal open and new penetrations

### E. ADA ACCESSIBILITY ISSUES

The Americans with Disabilities Act (ADA) was signed into law July 1990, extending civil rights protection for persons with disabilities. Effective April 1, 1994, the California Building Code (Part II, Title 24, CCR) incorporated the ADA Guidelines with various stipulations. Marx/Okubo made a general review of the primary aspects and the project generally appears to comply except as noted:

The following accessibility modifications are recommended at this time.

- Add curb ramps to connect buildings.
- Add parking stall signage.

### F. REGULATORY ISSUES

City Zoning, Building and Fire Departments were contacted by telephone to determine the current status of required permits or approvals and the existence of any outstanding code violations.

Department	Response	Outstanding Violations	Open Permits
Planning/Zoning	Y	None disclosed	None disclosed
Building	Y	Visit required	None disclosed
Fire Prevention	Y	Data not provided by phone	Unknown

*Subject*

Plaza at Puente Hills  
Burnham Pacific Properties Portfolio

*M/O*

*Proj.*  
6170

*Page*  
3 of 6

*Date Issued*  
10/11/00

*Updated*

## PROPERTY CONDITION SURVEY REPORT

### G. SIGNIFICANT ISSUES/MAJOR DEFICIENCIES

Significant issues include all safety and life threatening situations and/or code violations noted. Major deficiencies include areas of sufficient wear, weathering or moisture related material or finish deterioration that would compromise the functional integrity of the property. Also included are areas of substantial deferred maintenance or problems which, if left uncorrected over the next year, would result in significant damage to the buildings or their contents. The following significant overall issues or major deficiencies were noted:

- Deteriorated and faded asphaltic concrete paving and striping.
- Modify the existing theater to retail use.
- Roof repairs and maintenance.
- Stucco repairs.
- Equipment screen repairs at "The Hop."
- HVAC repairs and component replacement.

### H. RECOMMENDED ADDITIONAL INVESTIGATIONS

In situations where the initial condition survey disclose visible indications of probable significant underlying problems or deficiencies, additional consulting services involving either invasive investigation or further more specialized assessment may be required to determine the severity or extent of the conditions.

The following additional investigations are recommended:

- Structural evaluation of roof ties at IKEA.

### I. EXHIBITS/ATTACHMENTS

1. Photographs
2. FEMA Flood Plain Completed Determination Report
3. Seismic Consultant Report
4. Roofing Consultant Report

## PROPERTY CONDITION SURVEY REPORT

<b>J. ESTIMATED COST PROJECTIONS</b>			
No.	Item	Immediate Corrections	Capital Reserve Years 1-5
	<b>Sitework</b>		
1.	Asphalt, slurry coat deteriorated lots behind Buildings E, F, and G. Includes some reconstruction.	50,000	
2.	Asphalt seal coat entire parking area and restriping, including curbs and ADA		92,000
3.	Replace damaged sections of concrete curbs and sidewalks.		5,200
4.	Caulking at sidewalks.		2,000
5.	Paint site gates, bollards, light poles.		4,500
	<i>Subtotal Sitework</i>	\$50,000	\$103,700
	<b>Buildings</b>		
6.	Renovation of theater and adjoining buildings.		1,500,000
7.	Paint buildings		125,000
8.	Exterior stucco repairs.	10,000	25,000
9.	Repair equipment screen at "The Hop."	7,000	
	<i>Subtotal Building</i>	\$17,000	\$1,650,000
	<b>Structure</b>		
10.	Maintenance and repairs.	16,250	
11.	Annual roof maintenance.		20,000
12.	Perform additional structural analysis of wall ties at IKEA.	5,000	
	<i>Subtotal Structure</i>	\$21,250	\$20,000
	<b>Interior Common Areas</b>		
12.	No issues noted.		
	<i>Subtotal Interior Common Areas</i>	\$ 0	\$ 0
	<b>MEP</b>		
13.	HVAC component replacement.		160,000
14.	Replace aging HVAC units.		500,000
15.	Perform infrared electrical survey.	10,500	10,500
	<i>Subtotal MEP</i>	\$10,500	\$ 670,500
	<b>Accessibility</b>		
16.	Curb ramps needed at some areas to connect buildings	4,000	
17.	Disabled-accessible stall signage	2,000	
	<i>Subtotal Accessibility</i>	\$6,000	\$ 0
	<b>Life Safety</b>		
18.	Five-year fire sprinkler certification	\$5,000	\$5,000
	<i>Subtotal Life Safety</i>	\$5,000	\$5,000
	<b>Totals</b>	<b>\$109,750</b>	<b>\$2,449,200</b>
	<b>\$/SF/Year</b>	<b>\$0.22/sf</b>	<b>\$0.95/sf/yr</b>

It should be noted that work within tenant spaces relating to tenant improvement, replacement of fixtures and equipment, and ADA compliance, have not been included in the above costs. These items are typically addressed either during the tenant build-out or as part of ongoing operations and maintenance by the tenant.

Items considered routine maintenance or items costing less than \$2,000 in value, are not addressed unless they are repeated throughout the project, or considered to be life safety or code violation issues.

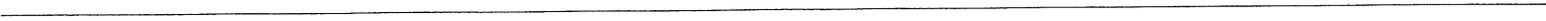
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Plaza at Puente Hills Burnham Pacific Properties Portfolio	Proj. 6170	5 of 6	10/11/00	

## PROPERTY CONDITION SURVEY REPORT

### Retail – Common Corrective Repairs and Capital Reserves

Assumptions: Immediate Repairs							
Item Description				Quantity	Unit	Unit \$	Total
Asphalt, slurry coat deteriorated lots behind Buildings E, F, and G. Includes some reconstruction				350,000	SF	.14	50,000
Immediate roof maintenance and repairs				1	LS	16,250	16,250
Exterior stucco repairs				1	LS	10,000	10,000
Repair equipment screen at "The Hop".				1	LS	7,000	7,000
Perform Phase II investigation at IKEA				1	LS	5,000	5,000
Perform infrared electrical survey				1	LS	10,500	10,500
Curb ramps needed at some areas to connect buildings.				4	EA	1,000	4,000
Disabled-accessible stall signage				22	EA	90.00	2,000
5-year fire sprinkler certification				1	LS	5,000	5,000
Assumptions: Capital Reserves							
Item Description	EUL	Age	RUL	Quantity	Unit	Unit \$	Total
Asphalt seal-coat and restripe	5	1	4	1,150,000	SF	.08	92,000
Replace damaged sections of concrete curbs and sidewalks	5	1	4	1,040	SF	5.00	5,200
Exterior wall prep and repaint	7	10	0	250,000	SF	.50	125,000
Budget for exterior stucco repairs	-	-	-	1	LS	25,000	25,000
Replace caulking at sidewalks	10	5	5	400	LF	5.00	2,000
Paint site gates, bollards, and light poles	20	15	5	9,000	SF	0.50	4,500
Roof maintenance budget	-			1	LS	20,000	20,000
Renovation of theater building	-			1	LS	1,500,000	1,500,000
Replace major HVAC components	10	13	0	160	TON	1,000	160,000
Replace HVAC rooftop units	15	13	2	200	TON	2,500	500,000
Perform 5-year sprinkler tests	5	-	0	10	RISER	500	5,000
Perform infra-red electrical survey	5	-	0	21	EA	500	10,500

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**THE PLAZA AT PUENTE HILLS**

June 2, 2000



Photograph #1

Typical shops elevation.



Photograph #2

View of parking area from Building G.

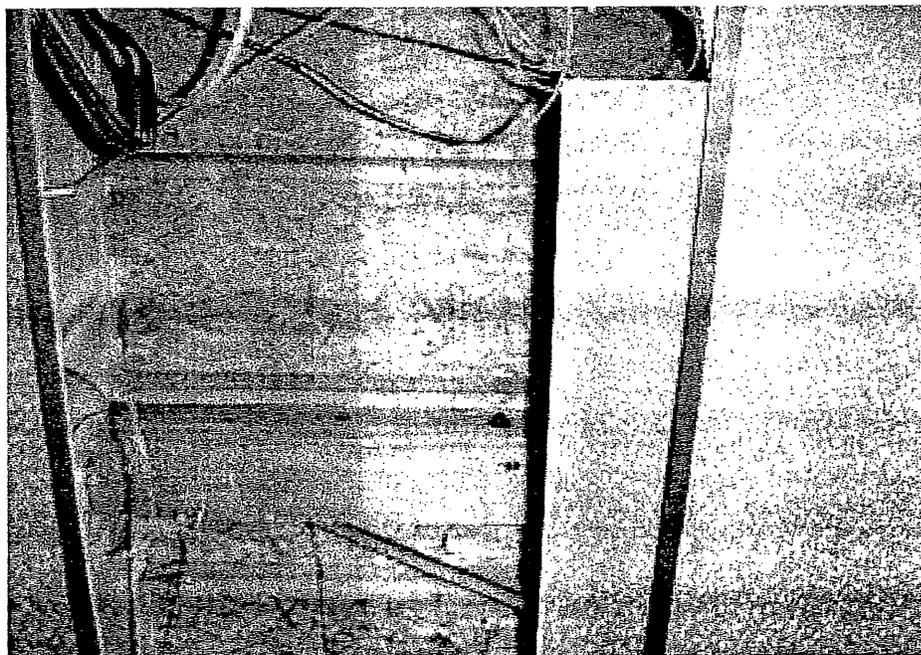
**THE PLAZA AT PUENTE HILLS**

June 2, 2000



Photograph #3

Close-up of stucco exterior surface.

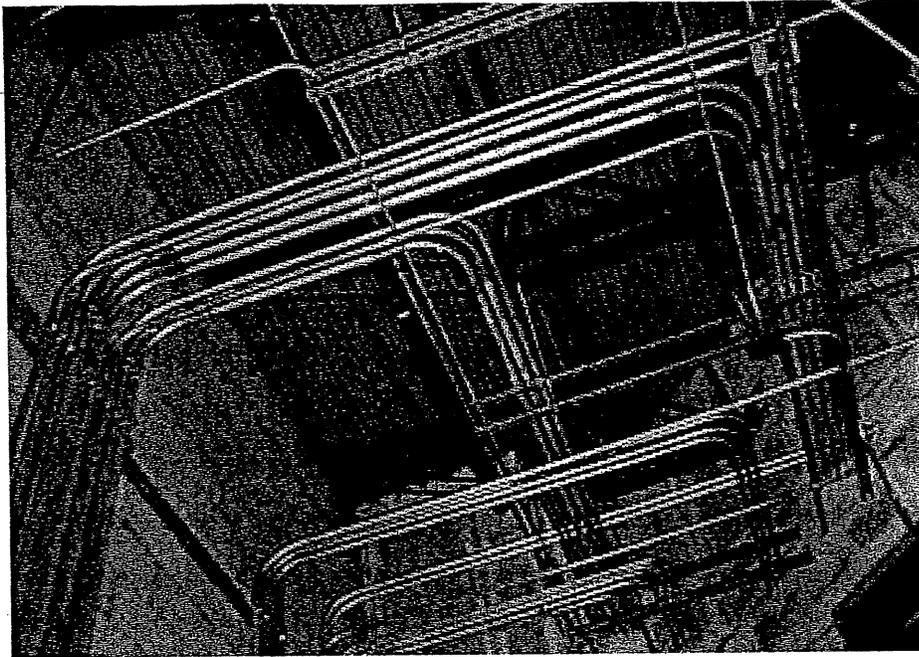


Photograph #4

Roof structure of Building E.

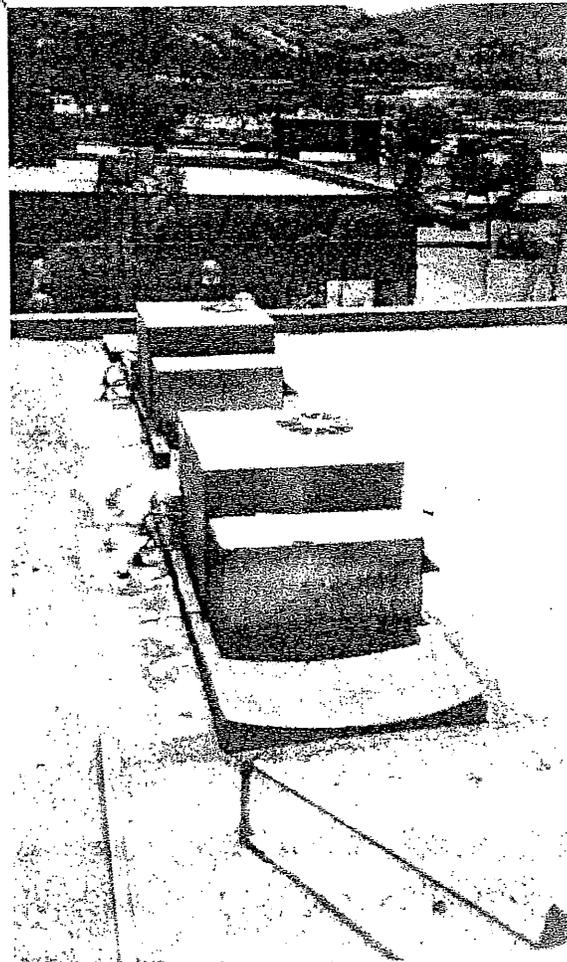
**THE PLAZA AT PUENTE HILLS**

June 2, 2000



Photograph #5

Roof structure of  
Building H.

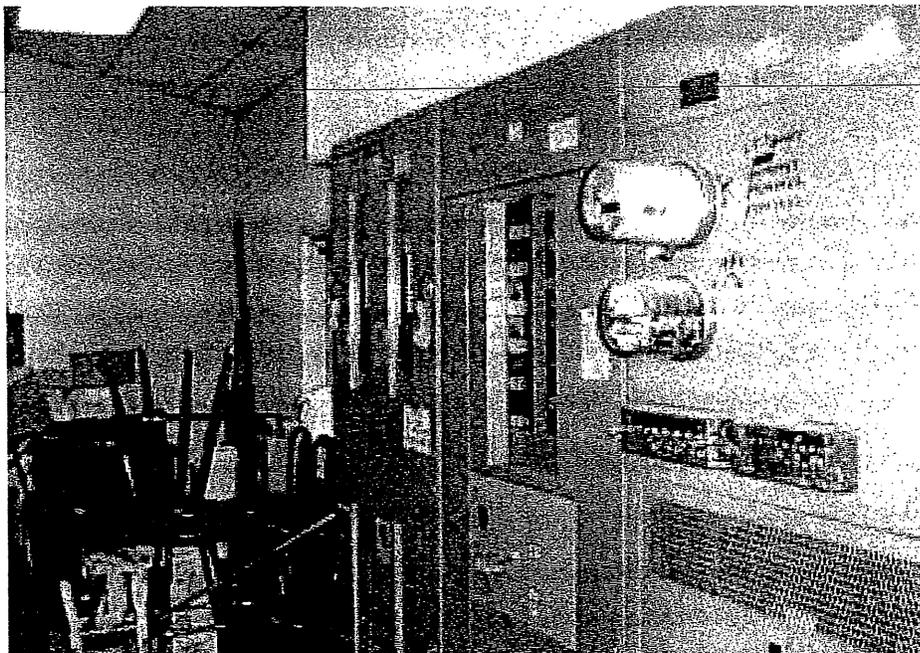


Photograph #6

View of rooftop  
equipment at  
Building H.

**THE PLAZA AT PUENTE HILLS**

June 2, 2000



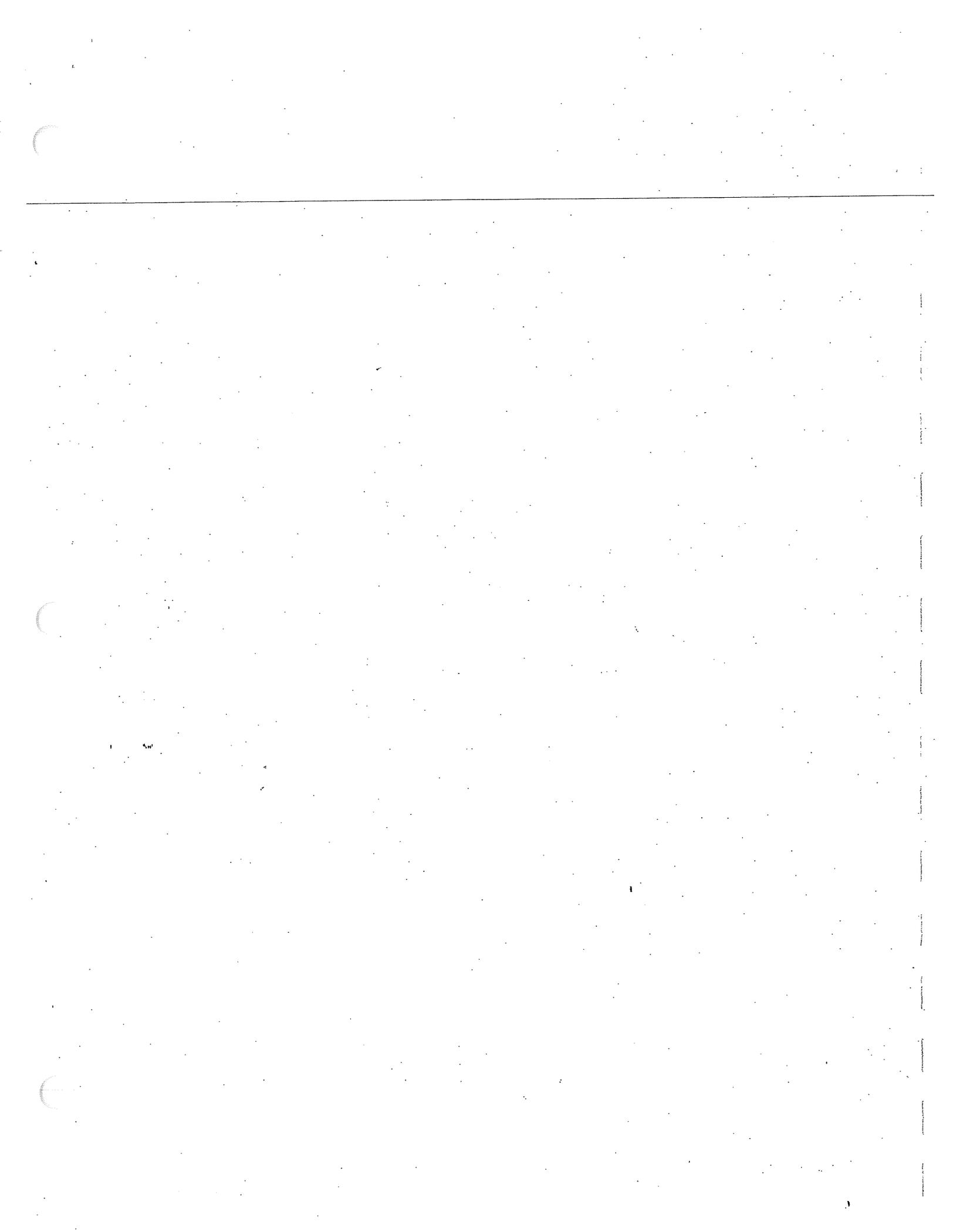
Photograph #7

Electric panel at  
Building E.



Photograph #8

Ramp needed at  
Building F.







# TARLOW ENGINEERING

**STRUCTURAL ENGINEERS**

235 E. Broadway Suite 321  
Long Beach, Ca. 90802  
(562) 436-6875 Fax (562) 436-6845

October 9, 2000

Marx/Okubo Associates, Ltd.  
150 Paularino Ave. Suite 192  
Costa, Mesa, Ca. 92626

Dear Gentlemen:

**RE: Plaza at Puente Hills  
City of Industry, California**

Tarlow Engineering has been retained by Marx/Okubo Associates, Ltd. to provide a structural/seismic review of an existing retail facility located at 17525-18271 Gale Av. in City of Industry, California. The attached report contains our structural and seismic findings regarding the above-referenced property.

The scope of services provided by Tarlow Engineering is summarized below:

1. Conduct a site visit to assess the general condition of the structural systems.
2. Review the construction documents, if available, to evaluate the design criteria of the structural/seismic systems.
3. Review the original geotechnical report, if available, for foundation recommendations, liquefaction potential, and/or surface fault rupture potential.
4. Assess if the building(s) is capable of maintaining the vertical load-carrying capacity of its structural system under a code level seismic event.
5. Determine the peak ground acceleration (PGA) using current USGS maps and Modified Mercalli Intensity (MMI) for the site, based on the estimated PGA and our engineering judgment.
6. Discuss seismic issues and recommended mitigation, if deemed necessary.

The purpose of this facility survey/condition assessment is to provide input for business decisions regarding risk retention or transfer of risk for the acquisition or financing of properties. This structural assessment deals primarily with seismic risk, although gravity and wind effects are also considered, if applicable. A rapid evaluation, using FEMA-178 screening process as a guideline, within the limitations of the available information, was performed to aid in identifying potential life-safety issues and to assess the vulnerability of this property to seismic damage relative to other similar buildings.

Should you have any questions regarding this report, please do not hesitate to contact our office.

Sincerely,  
**TARLOW ENGINEERING,**



Kenneth Tarlow  
Structural Engineer

**SEISMIC EVALUATION**  
Puente Hills Mall – City of Industry, California

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**I. GENERAL**

The project consists of 23 (by our count), separate structures comprising approximately 725,000 square feet. Included are larger tenants like Ikea, Circuit City and Office Depot. Located on the site between the larger stores are strip stores. At the center of the property is a vacant movie theatre complex. Finally, arranged throughout the site are small pad buildings occupied by restaurants. All the buildings appear to be constructed in during the 1980's.

This review consisted of a brief site visit performed on October 2, 2000. Drawings were not provided for review. Actual framing conditions and connections could not be fully verified due to concealed conditions and limited access. There may be unknown or related conditions that effect the structural performance of the building.

**II. DOCUMENTS REVIEWED**

**Structural Drawings**

None available for review.

**Geotechnical Reports**

None available for review.

**Property Condition Surveys**

Level 1 seismic review by Project Resources Inc. Dated January 29, 1997

**III. DESIGN CRITERIA**

*Design Criteria:* No drawings were provided for review. However, based upon the date of original construction for the original buildings, the 1985 Uniform Building Code (UBC) was likely used for the design of all these buildings.

**IV. FOUNDATIONS**

*Geotechnical Report:* The geotechnical report for the project was not provided for review.

*Foundation System:* Although we did not have drawings to review, we assumed that the structure is founded on spread footings at the interior columns and strip footings or

thickened slab edges at the exterior and interior walls. The ground floor likely consists of a concrete slab-on-grade.

*Condition:* No exposed foundations were observed during our site observation. The foundation system appears to carry existing loads with no significant problems.

## V. FRAMING SYSTEMS

### Typical buildings

*Description:* The roof framing for most buildings is a traditional panelized roof system. Main girders constructed glue-lam beams supported on steel columns support 4x purlins. The purlins are spaced eight feet on center. Spanning between the purlins are sub-purlins generally constructed with of 2x4's or 2x6's. We observed of plywood skin over the framing.

It is assumed that the ground floor is a reinforced concrete slab-on-grade.

Most of the buildings in the facility utilize block masonry walls on the exterior. Based on our experience in seismic zone 4 these walls would be fully grouted.

Lateral loads due to wind or earthquakes inertia forces on the exterior walls are distributed to the plywood roof diaphragms, then to the perimeter CMU walls parallel to the direction of force. These forces are then transferred to the foundation and the soils.

*Condition:* Much of the framing was covered by finishes and could not be observed. There were no signs of settlement in the buildings.

### Ikea

*Description:* The roof framing for this building is similar to the other buildings of the facility. As mentioned before the roof system can be described as a traditional panelized roof system. Main girders constructed glue-lam beams supported on steel columns support 4x purlins. The purlins are spaced eight feet on center. Spanning between the purlins are sub-purlins generally constructed with of 2x4 or 2x6's. We observed of plywood skin over the framing.

It is assumed that the ground floor is a reinforced concrete slab-on-grade.

The second floor of the Ikea building is system of plywood web commercial grade wood joists spanning between steel columns. The floor is covered with plywood.

The exterior walls of the Ikea Building are constructed using precast concrete panels (tilt-up panels). The panels are roughly 6" thick and more than 30 feet high they are braced at the floor and roof.

Lateral loads due to wind or earthquakes inertia forces on the exterior walls are distributed to the plywood roof diaphragms, then to the perimeter CMU walls parallel to the direction of force. These forces are then transferred to the foundation and the soils.

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**Condition:** Much of the framing was covered by finishes and could not be observed. There were no signs of settlement in the buildings.

### **Movie Theatres**

**Description:** There was no access to the theatres. The roof framing for this building is a traditional panelized roof system. Main girders constructed glue-lam beams supported on steel columns support plated trusses. The purlins are spaced eight feet on center. Spanning between the purlins are sub-purlins generally constructed with of 2x4's or 2x6's. We observed of plywood skin over the framing. We measured the bays of the column spacing to roughly 50'x 50'.

It is assumed that the ground floor is a reinforced concrete slab-on-grade.

Lateral loads due to wind or earthquakes inertia forces on the exterior walls are distributed to the plywood roof diaphragms, then to the perimeter CMU walls parallel to the direction of force. These forces are then transferred to the foundation and the soils.

**Condition:** Much of the framing was covered by finishes and could not be observed. There were no signs of settlement in the buildings.

### **Movie Theatres**

**Description:** Finishes covered all the framing. It is our experience that a panelized roof system would be used in this type of building.

There is a mezzanine level at the center of the building. Again, we had no access to plans, and the finishes did not allow us to see the type of structural system used.

It is assumed that the ground floor is a reinforced concrete slab-on-grade.

Lateral loads due to wind or earthquakes inertia forces on the exterior walls are distributed to the plywood roof diaphragms, then to the perimeter CMU walls parallel to the direction of force. These forces are then transferred to the foundation and the soils.

**Condition:** Much of the framing was covered by finishes and could not be observed. There were no signs of settlement in the buildings.

**Pad Buildings (Mimi's Café, Claim Jumper, Friscos, Jack in the Box, Del Taco, Building W, Building F, and The Hop, and Etc...)**

**Description:** The roof framing for these is unknown. However we can surmise that the framing is mixture 2x roof rafters, heavy timber beams, and wood stud bearing walls.

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It is assumed that the ground floor for each of the buildings is a reinforced concrete slab-on-grade.

Lateral loads due to wind or earthquakes inertia forces on the exterior walls are distributed to the roof diaphragm, then to shear walls parallel to the direction of force. The shear walls are plywood sheathed stud walls. These forces are then transferred to the foundation and the soils.

**Condition:** Much of the framing was covered by finishes and could not be observed. There were no signs of settlement in the buildings. No significant deficiencies were noted.

## VI. SEISMIC EVALUATION

**Seismic Issues:** Based on our review of the project, the following features may influence the seismic performance of the buildings:

### Typical buildings

**Building Classification:** Low Rise, Reinforced Masonry Shear Wall Building

#### **Positive Features:**

- The buildings, are one-story, rectangular buildings with no significant physical discontinuities in plan or vertical configuration. Buildings of this type tend to perform better in earthquakes compared to similar buildings with plan and vertical irregularities.

#### **Negative Features:**

- Side bolted eccentric wall tie connectors.
- Ductility of wall tie connectors and continuity ties are far less than current code requirements.

**Condition:** We anticipate that the overall buildings will maintain its vertical load carrying capacity during a code level event.

**Equipment Restraint:** We were unable to verify the anchorage of any of the roof-mounted units

### Ikea

**Building Classification:** tilt-up (Low Rise)

#### **Positive Features:**

- The building is two-story, rectangular building with no significant physical discontinuities in plan or vertical configuration. Buildings of this type tend to perform better in earthquakes compared to similar buildings with plan and vertical irregularities.
- 

***Negative Features:***

- Tilt-up buildings with PA type wall anchors are susceptible to high rates of damage
- Eccentric continuity ties have failed in past earthquakes

***Condition:*** Nearly one third of the buildings with similar wall tie anchors found in this structure experienced partial collapse.

***Equipment Restraint:*** We were unable to verify the anchorage of any of the roof-mounted units

**Pad Buildings (Mimi's Café, Claim Jumper, Friscos, Jack in the Box, Del Taco, Building W, Building F, and The Hop, and Etc...)**

***Building Classification:*** Wood Frame (Low Rise)

***Positive Features:***

- Wood framed structures perform very well in recent earthquakes. 'Commercial' wood framed structures even performed better.

***Negative Features:***

- Large open spaces without numerous crosswalls generally present in wood frame construction.

***Condition:*** We anticipate that the overall buildings will maintain their vertical load carrying capacity during a code level event.

***Equipment Restraint:*** We were unable to verify the anchorage of any of the roof-mounted units

## VII. SITE AND SEISMOLOGY

### Most Significant Faults or Seismic Sources

Fault or Source	Distance From Site	MCE Magnitude Potential
Whittier	3	6.8
San Jose	4	6.5
Elysian Park	8	6.7
Sierra Madre	10	7.0
Chino-Central Av.	11	6.7
Raymond	12	6.5
Clamshell Sawpit	13	6.5
Cucamonga	15	7.0
Verdugo	15	6.7
Hollywood	19	6.4
Newport Inglewood	19	6.9

Item	Description/Findings
1997 UBC Seismic Zone	Zone 4
Near-Field Effects	Near Source Zone for Whittier and San Jose both are Class B Faults
475-yr PGA (from USGS)	.48
Liquefaction Potential	Low
Landslide Potential	Low
Surface Fault Rupture	N/A
Earthquake Fault Zone (A-P)	N/A
Seismic Hazard Zone (SHZ)	N/A
Estimated 475-yr MMI	IX

## VIII. LOSS ESTIMATION

### 475-yr Return Period

Building	ATC-13 Classification	PML Expected Mean Loss	PML Range 90 <sup>th</sup> Percentile Loss
Typical Mall Building	#9 - Reinforced Masonry Shear – Low Rise	15%	20%
Ikea	#21 – tilt-up	24%	35%
Pad Buildings (Mimi's Café, Claim Jumper, Friscos, Jack in the Box, Del Taco, Building W, Building F, and The Hop, and Etc...)	#1 - Wood Frame – Low Rise	10%	20%
Site Composite		15%	23%

<i>ASTM E2026-99 Standard:</i>	<i>475-yr SEL:</i>	<i>15%</i>
	<i>475-yr SUL:</i>	<i>23%</i>
	<i>Level of Review:</i>	<i>Level 0</i>

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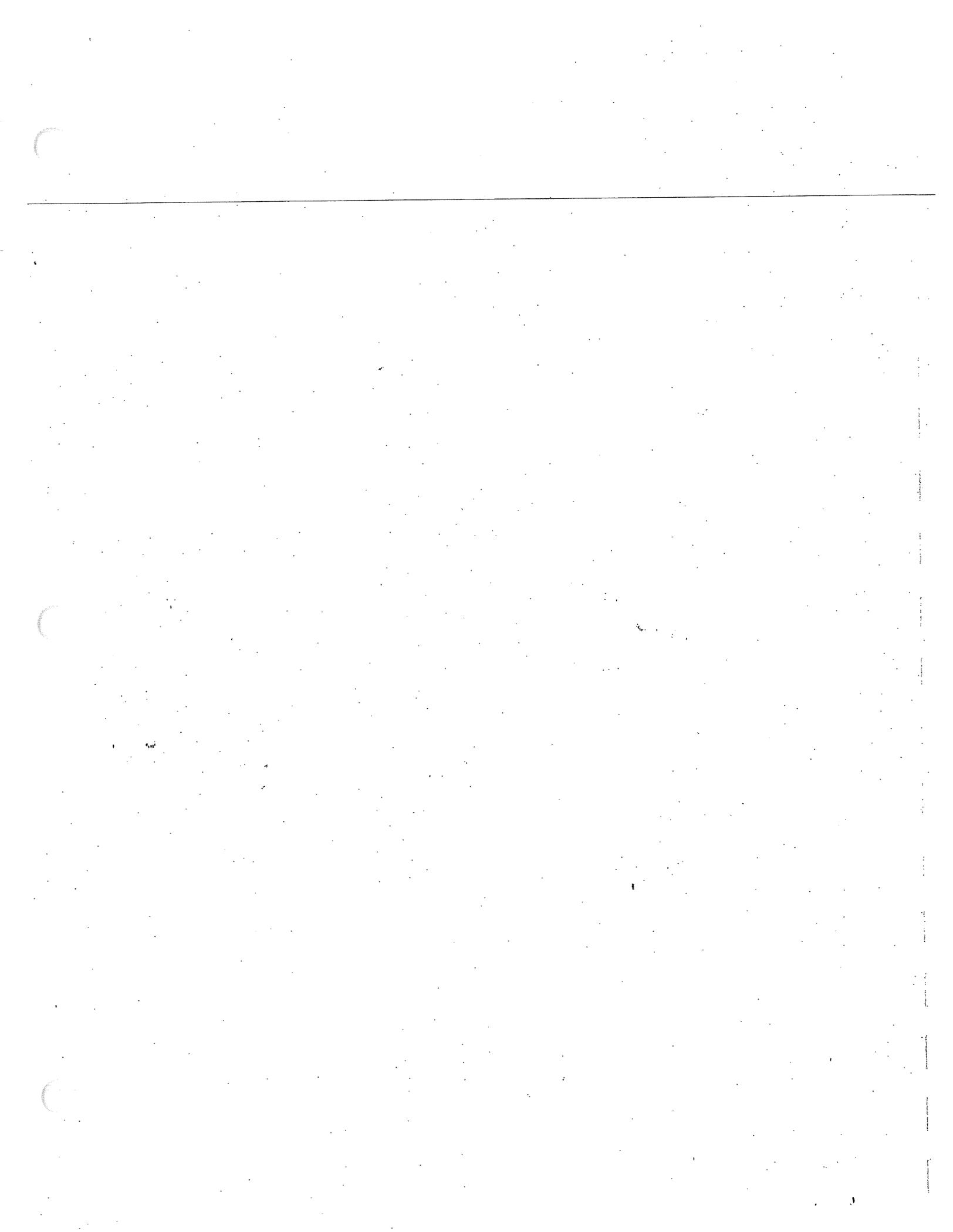
## **IX. RECOMMENDATIONS**

The relatively high PML is dictated directly by the site information. Upgrading the structural systems would not necessarily reduce seismic risk. We have no recommendations for these buildings at this time.

Since the Ikea building was constructed with pre-1997 UBC wall tie anchors it may be subject to collapse. This is a controversial subject within the Engineering community. Many Engineers believe that pre-1997 wall anchors should be replaced without exception. Others believe, that dependent on the demand/capacity ratio and the quality of workmanship installing the existing anchors observed in the field, that perhaps the existing wall tie anchors might be sufficient. Therefore, we recommend that a California Registered Structural Engineer review the wall tie anchors in more detail, and provide seismic retrofit recommendations (if any).

## **X. PROFESSIONAL DISCLAIMER**

This evaluation was based on limited information as described above. This report has been performed using the same degree of care and skill ordinarily exercised for this type of professional service by structural engineers practicing in this area at this time. No other warranty, expressed or implied, is made as to the professional advice in this report.





**KELLEHER, BOYD & ASSOCIATES**  
**ROOFING CONSULTANTS**

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**INVESTIGATIVE INSPECTION REPORT**  
**AND**  
**CONDITION SURVEY**  
**FOR**

**PLAZA AT PUENTE HILLS**  
**17525-18271 Gale Avenue**  
**City of Industry, CA**

**September 20, 2000**

INVESTIGATIVE INSPECTION REPORT  
AND  
CONDITION SURVEY  
FOR

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Plaza at Puente Hills  
17525-18271 Gale Avenue  
City of Industry, CA

EXECUTIVE REVIEW

The scope of this work consisted of a visual inspection of the existing conditions of the roofs at Plaza at Puente Hills, 17525-18271 Gale Avenue, City of Industry, CA. Test plugs, representative of different systems were taken, read, replaced and repaired.

No previous roofing reports or documentation regarding prior maintenance or repairs were provided for review. Access to Claim Jumper and Benihana Restaurants were denied. According to information provided by the Owner, the center was built in 1987 and renovated in 1993.

Building design and construction details vary throughout the complex. No system specifications or manufacturer's warranties were provided for our review.

SYSTEM TYPE:

All shopping center roofs consist of a 4-ply built-up roof with a mineral surfaced capsheet over a plywood deck, with the exception of the Theater roofs, which have a gravel surface. At the some building fronts there are small canopy roofs with built-up roofs and standing seam, sheet metal mansards that drain to gutters.

PARAPETS/FLASHING:

Parapets consist of concrete or stucco with roofing material attached part way and covered with a wall mounted, sheet metal counterflashing detail or covered with the same system as the roof, attached to the parapet top and covered with a side locking sheet metal coping detail and/or asphalt shingles.

DRAINAGE:

The roofs were designed with adequate slope and drainage, utilizing interior drains and overflows, thru-wall scuppers and overflows and/or gutters. There are some deflected areas near gravel stop/gutter areas.

FINDINGS:

For all roofs: The term "Routine Maintenance", mentioned in this report will refer to the removal of all leaves, debris, trash and dirt from the roof and drainage areas; sealing of all open parapet laps, base flashing, penetration bases and collars, curb corners; sealing of all thru-wall scuppers at inner and outer walls; filling of all pitch pans; replacement of sealants; caulking, due to normal wear and tear, as needed.

It does not appear that any of the roofs have been maintained in some time. Many tenant additions have placed new penetrations throughout the project, especially on the Buildings S & Y. Numerous attic/parapet vents are missing, allowing birds and vermin into the attic space (behind the mansards). Missing asphalt shingles, at the parapets, need to be addressed.

The sight screen on The Hop is bowing and will need additional support. Self-flashing skylights on the Ikea store tend to leak, however, most leak sources appeared to be from maintenance items. Throughout the complex, especially over the smaller shop areas are many sleepers, penetrations and new installations that need to be repaired or permanently flashed. Metal joints, at the gravel stops, will need to be reinforced during maintenance.

SUMMARY AND RECOMMENDATIONS

The roof conditions range from good to fair (movie theater). The roofs should continue to perform for another 5 years, with recommended repairs and routine maintenance.

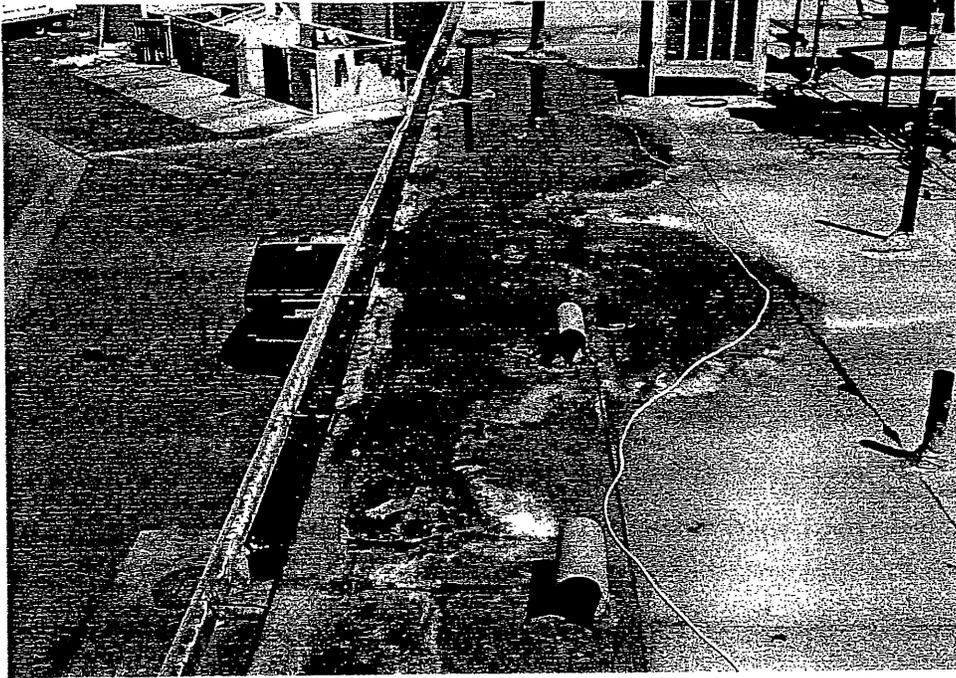
All Roofs:

Immediate maintenance:	\$ 10,000.00
Annual maintenance:	\$ 20,000.00

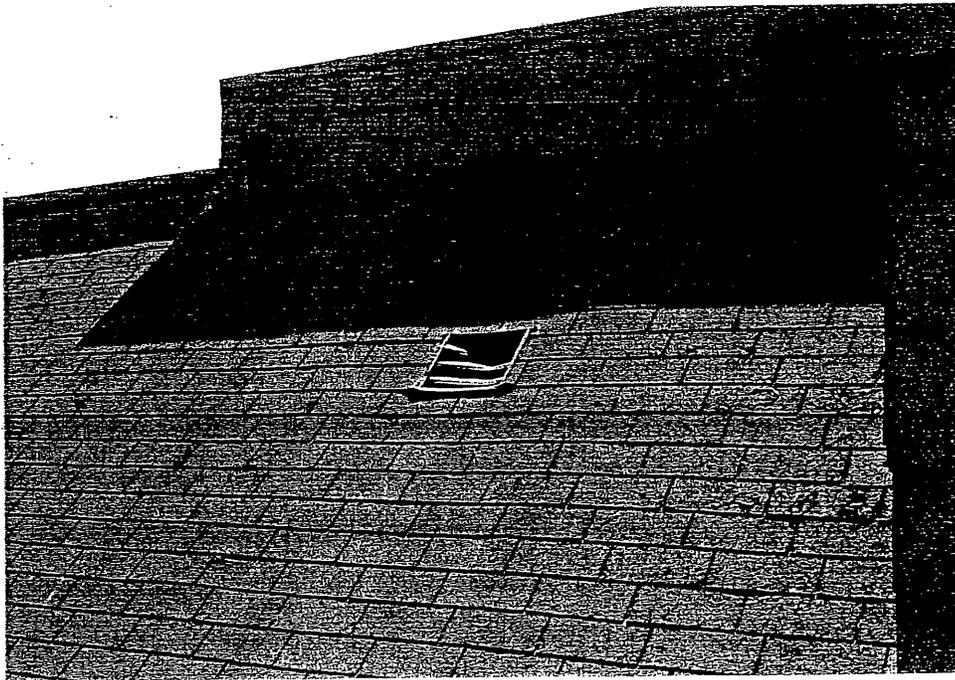
Repairs:

50 new penetrations	\$ 2,500.00
Reinforce roof at rear of Y building	\$ 1,500.00
Repair roof on S building	\$ 500.00
Replace missing asphalt shingles	\$ 750.00
Miscellaneous repairs to sleepers, etc.	\$ 1,000.00

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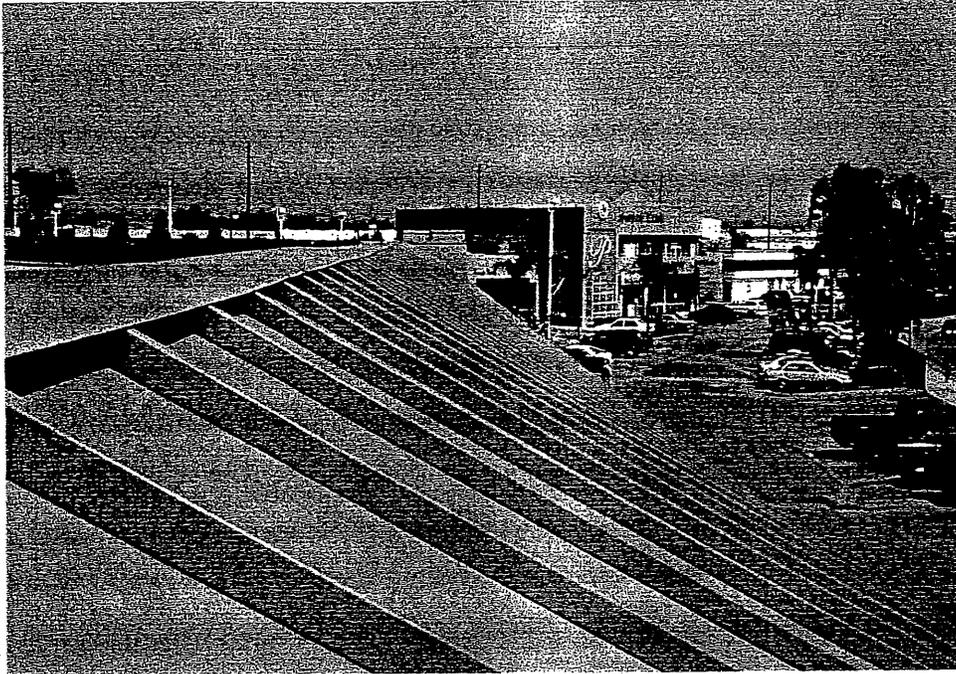


Water ponds at rear of Y building.

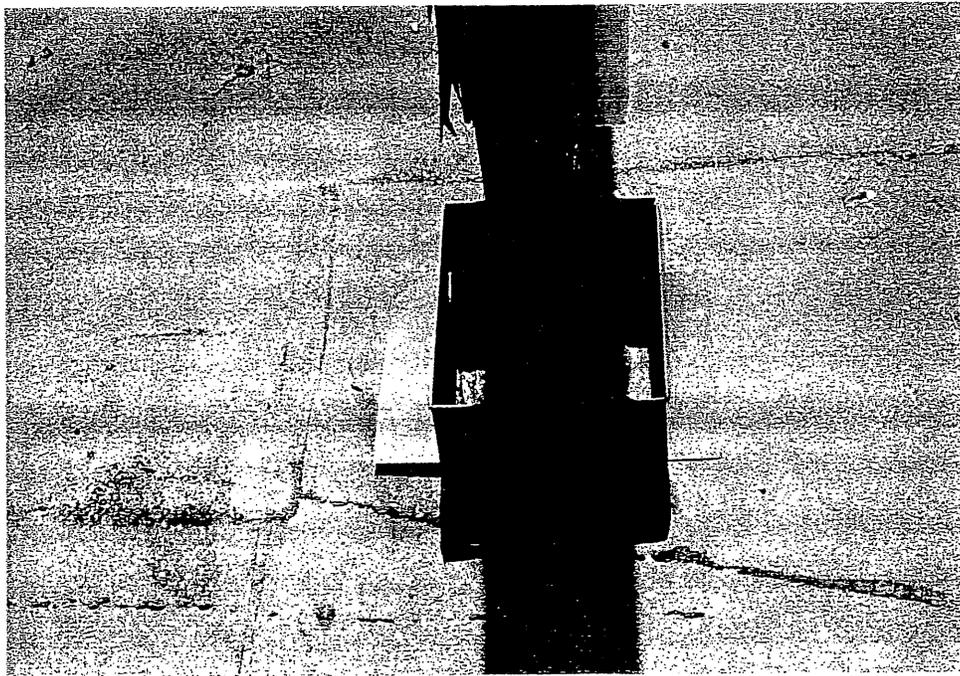


Typical asphalt shingle detail. Note damaged wall vent.

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Typical metal mansard.



New pitch pans were not flashed or filled.

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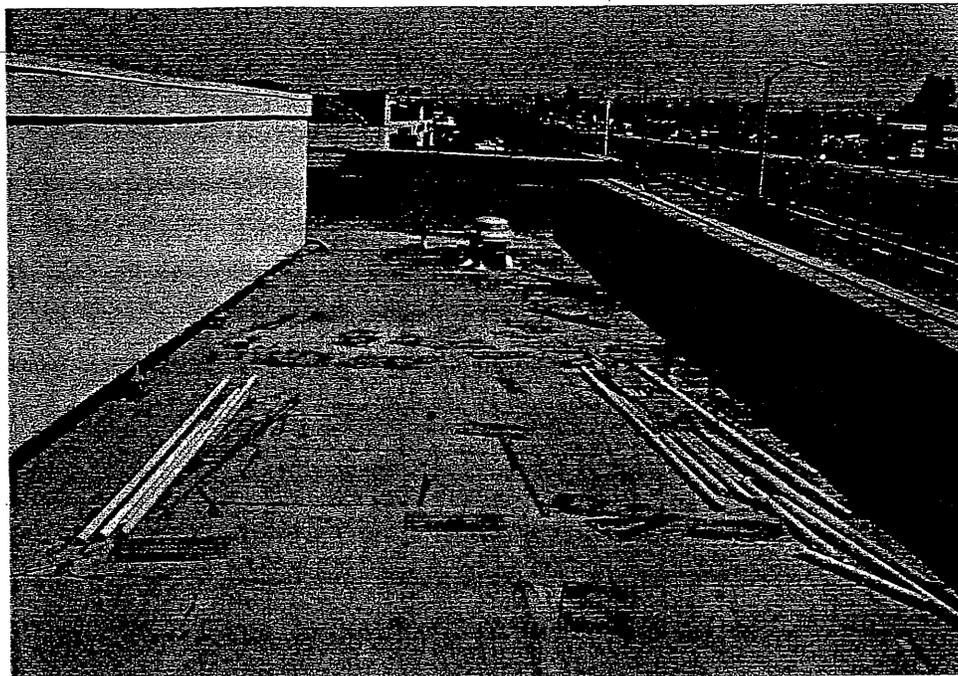


Membrane was cut at HVAC installation and never repaired.

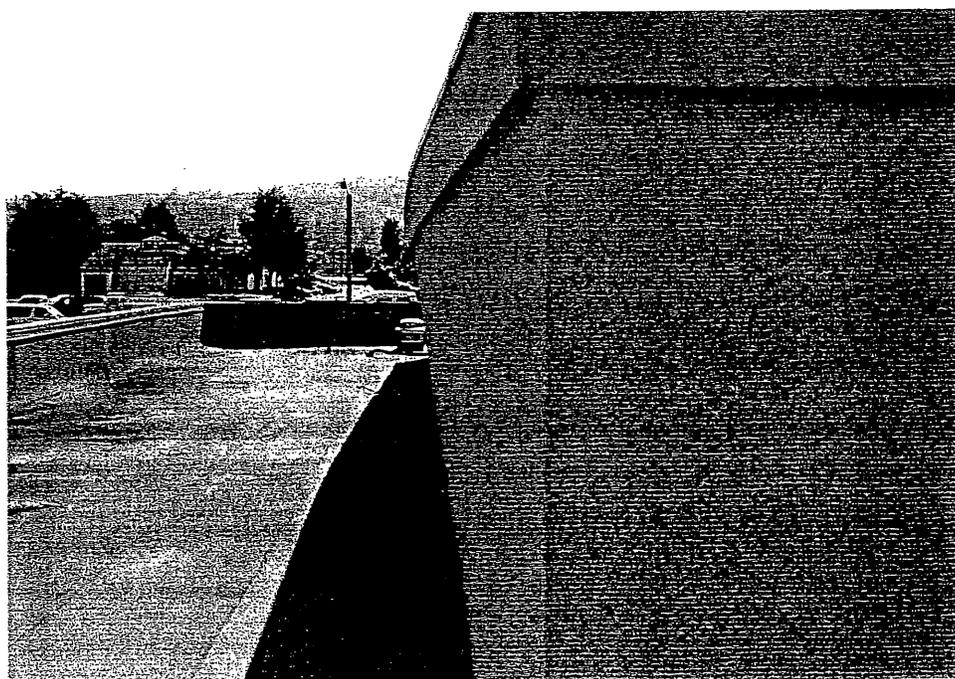


Roofs have not been maintained in some time.

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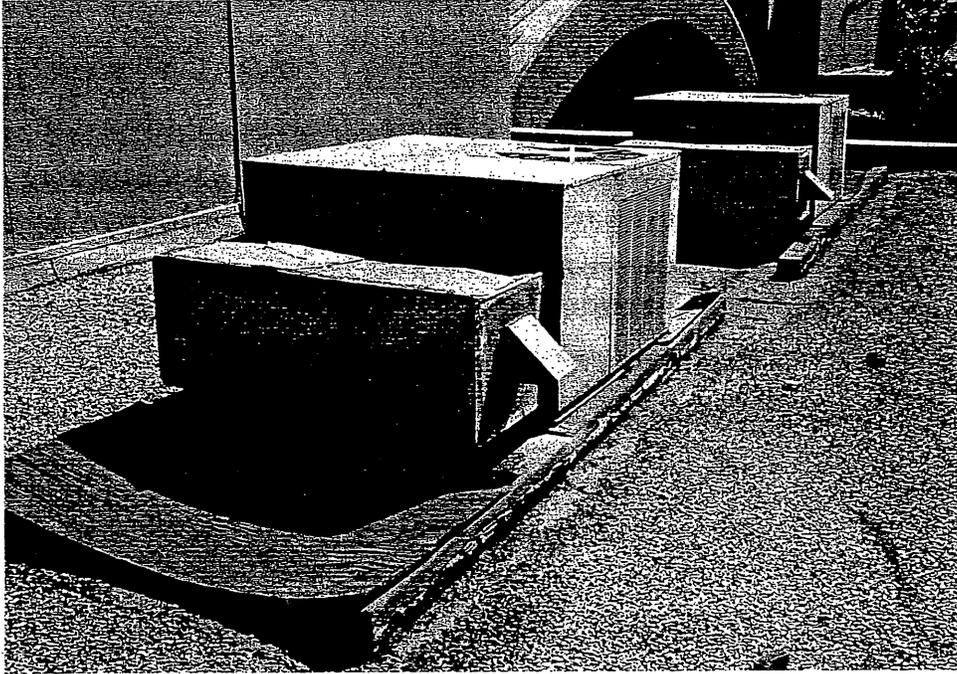


Construction debris and patching on The Hop roof.

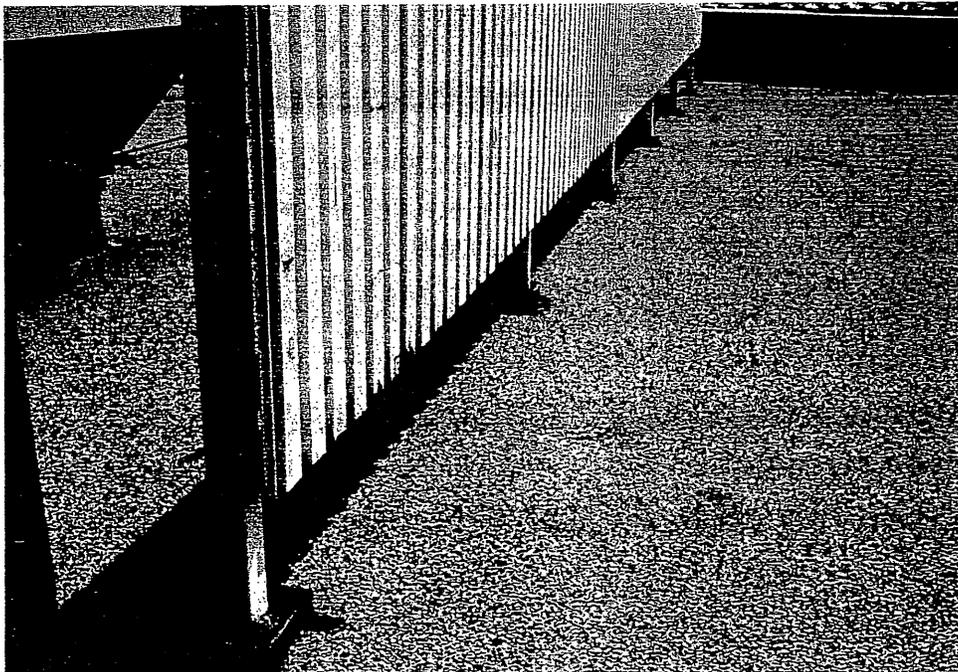


Sight screen is bowing.

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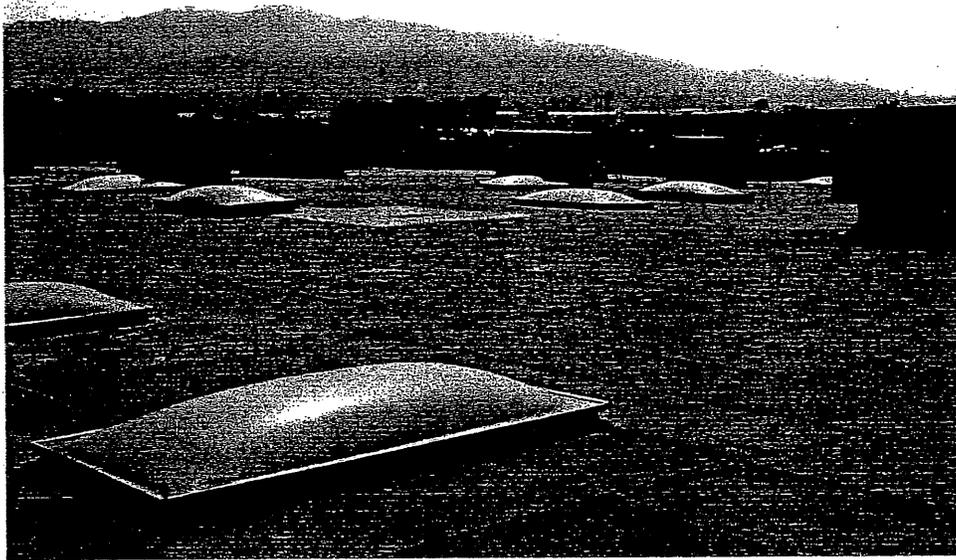


Poor sleeper details on movie theater.

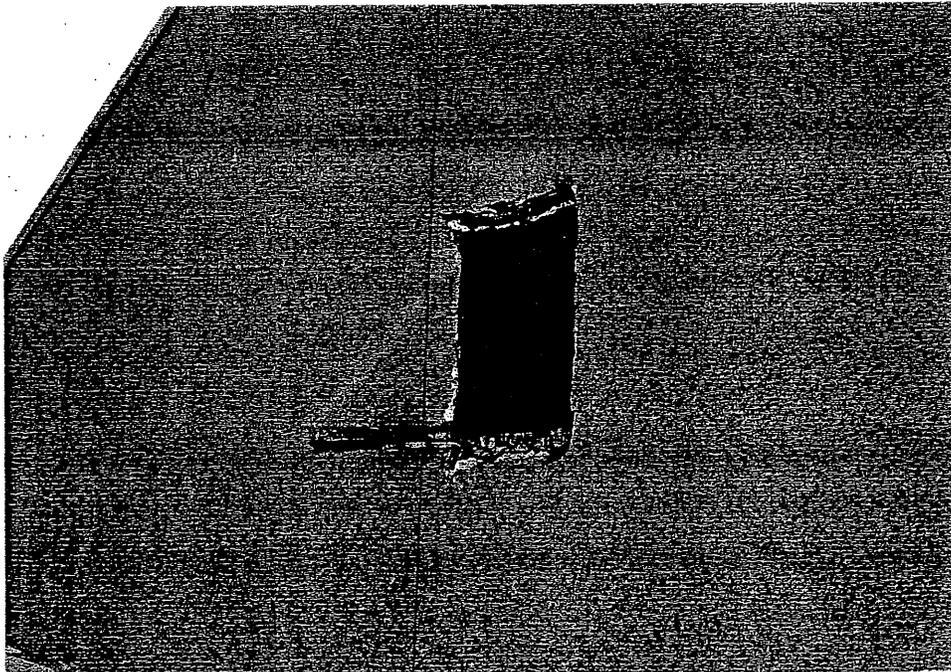


All sight screen pitch pans need to be filled and crowned.

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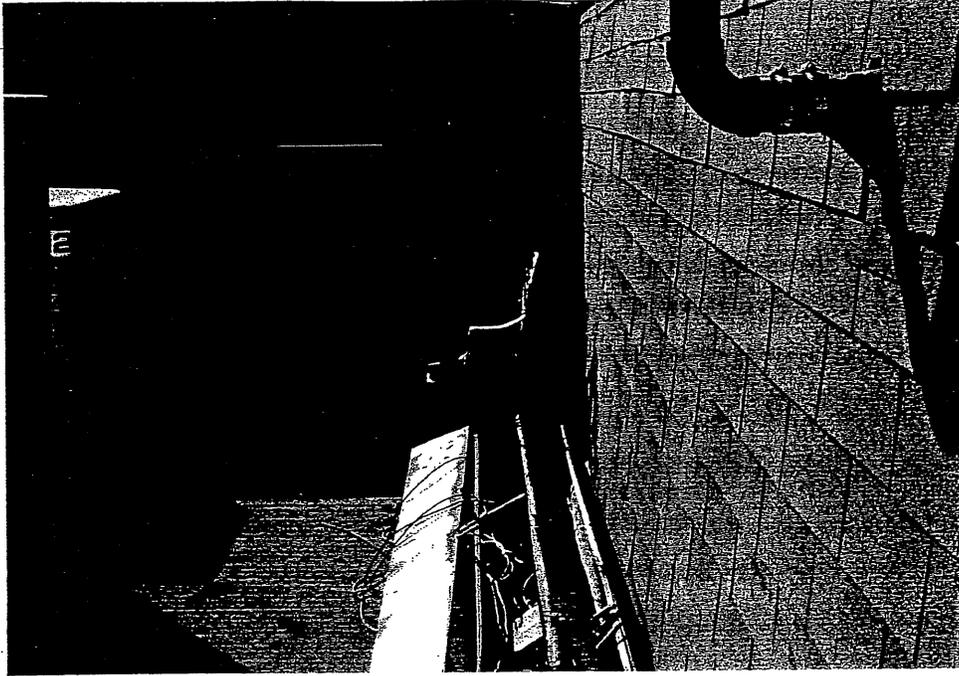


Skylights have been a leaking source at the Ikea store.

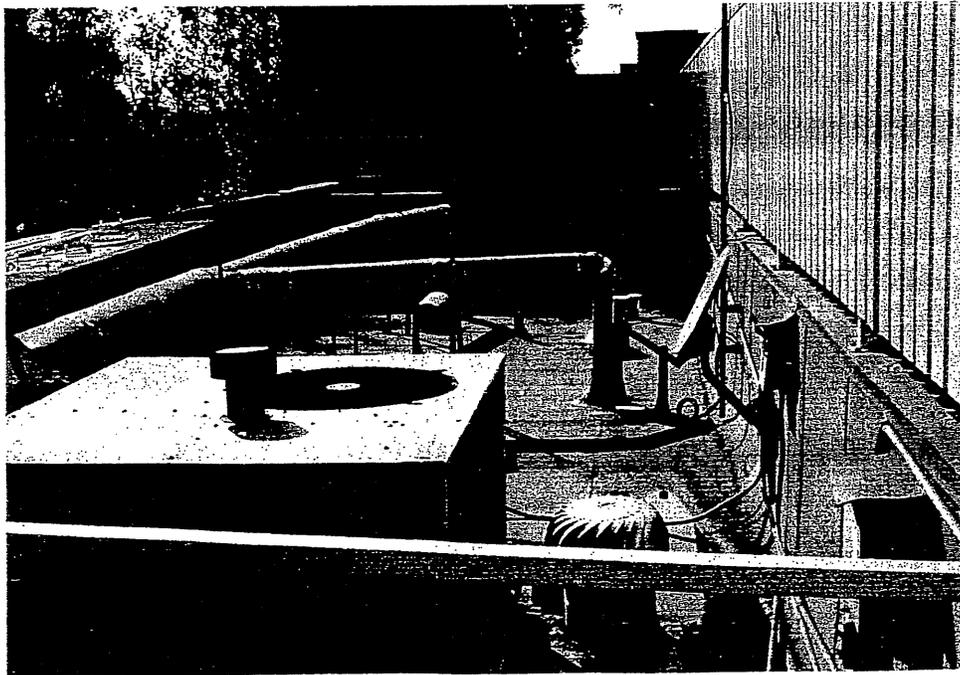


Wall vent or cover is missing (sleep center).

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Construction debris is piled on Mimi's Cafe roof.



Frisco's roof was recently replaced.